
Master Oppgave, Tilgjengelighet Documentation

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PROJECT

This project is made in association with the Norwegian Mapping Authority as a part of my master thesis.

The application is ment to make it easier to access the Norwegian Mapping Authority database for universal design. It is made within QGIS so all countys in Norway can get access to the application without paying any license.

TUTORIAL

2.1 Instalation

If the plugin is available in plugin manager, then open plugin manager and search for tilgjengelighet. Click on the plugin and install. If the plugin is not available in plugin manager, then you can download it from <https://github.com/KaspArno/Tilgjengelighet>. Download the file and unzip it in C:\Users\<your_user>.qgis2\python\plugins. Make sure the folder's name is Tilgjengelighet, and not git-Tilgjengelighet. You should now be able to find it in plugin manager.

2.2 Usage

Click on 'hent data' when you are in your working tab. Choose the county and city you want data from, and fill the form if you want to specify more.

After you press 'filtrer', the main window closes and visualise the results in the map canvas. The widget on the right will present data on the object you have selected. This widget also gives you the option to add a background layer or export the data to excel or image. If you want to do a new search, you can press the 'filtrer' button on top of the left widget or on the plugin icon.

3.1 Tilgjenglighet

class Tilgjenglighet.**Tilgjenglighet** (*iface*)
QGIS Plugin Implementation.

OpenBrowser ()
Opens broeser to save file

addLayer (*layerType*)
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

add_action (*icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None*)
Add a toolbar icon to the toolbar.

Parameters

- **icon_path** (*str*) – Path to the icon for this action. Can be a resource path (e.g. ‘:/plugins/foo/bar.png’) or a normal file system path.
- **text** (*str*) – Text that should be shown in menu items for this action.
- **callback** (*function*) – Function to be called when the action is triggered.
- **enabled_flag** (*bool*) – A flag indicating if the action should be enabled by default. Defaults to True.
- **add_to_menu** (*bool*) – Flag indicating whether the action should also be added to the menu. Defaults to True.
- **add_to_toolbar** (*bool*) – Flag indicating whether the action should also be added to the toolbar. Defaults to True.
- **status_tip** (*str*) – Optional text to show in a popup when mouse pointer hovers over the action.
- **parent** (*QWidget*) – Parent widget for the new action. Defaults None.
- **whats_this** – Optional text to show in the status bar when the mouse pointer hovers over the action.

Returns The action that was created. Note that the action is also added to self.actions list.

Return type QAction

assign_combobox_hc_parking ()
Assigning a AttributeForm object to each option in hc parking

assign_combobox_inngang ()
Assigning a AttributeForm object to each option in inngang

assign_combobox_parkeringsomraade ()
Assigning a AttributeForm object to each option in parkeringsområde

assign_combobox_vei ()
Assigning a AttributeForm object to each option in vei

canvasCrs ()
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

change_search_name ()
Changes the name of search baes on current tab and fyle and kommune

createGdalTmsLayer (*layerType, name*)
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

create_where_statement (*attributes*)
Create a where statement for search :param attributes: :type attributes: list<AttributeForms>
Returns a where statement string sorted after given attributes
Return type str

create_where_statement2 (*attributes*)
Create an optinal where statement for search :param attributes: :type attributes: list<AttributeForms>
Returns a where statement string sorted after given attributes
Return type str

excelSave ()
obtained from xytools, Saves features to excel format @author: Richard Duivenvoorde

fill_combobox (*layer, feat_name, combobox*)
Filling out comboboxes based in features in layer
Parameters

- **layer** (*qgis._core.QgsVectorLayer*) – the layer that holds the attributes
- **feat_name** (*str*) – the name of the feat that the attributes should be gathered from
- **combobox** (*QComboBox*) – The combobox to fill

fill_combobox_mer_mindre (*combobox*)
Fill combobox with default text
Parameters **combobox** – QComboBox

fill_fylker ()
Fill up the combobox fylker with fylker from komm.txt

fill_infoWidget (*attributes*)
Filling infowidget with attributes name and no value. Also ajustes size of infowidget
Parameters **attributes** (*list<AttributeForms>*) – List of gui attriibutes

filtrer (*attributes*)
Goes throu all attributes in current tab, creates a where statement and create layer based on that

fylke_valgt ()
Fill uo komune combobox with kommune in chosen fylke

getFeatures (*featuretype*)

This code is taken and adjusted from WFS 2.0 Client written by Juergen Weichand Getting features for TilgjengelighetTettsted, modifye to include friluft

get_previous_search_activeLayer ()

Open filtering window set to preweus choises

get_temppath (*filename*)

Creating a temperarly path for a temporary file :param filename: String name for file :type filename: str, QString

Returns string of full path

Return type str

hentData ()

Getting data based on current tab index

hideLayer (*mapLayer*)

Hides a layer that is in layerpanel

hide_show_rampe ()

Hides or shows rampe

highlightSelected ()

Highlights the object viewed in infowidget

httpRequestFinished (*requestId, error*)

Calls when rekest is finnished

httpRequestStartet ()

Calls when rekest has started

infoWidget_next ()

shows next object in infoWidget

infoWidget_prev ()

shows previous object in infoWidget

initGui ()

Create the menu entries and toolbar icons inside the QGIS GUI.

komune_valgt ()

Alter the name on seach after kommune is chosen

lagre_lag ()

Saves layer as exported

obj_info ()

Fills infowidget with info of current object

openLayer_background_init ()

The folowing code has been taken out from OpenLayers Plugin written by Sourcepole

open_export_layer_dialog ()

opens the excpert gui

reset ()

Resets the gui back to default

run ()

Run method that performs all the real work

selectedObjects (*selFeatures*)

changing number of selected objects in infowidget and setting current selected object :param selFeatures:
Selected features of layer

setMapCrs (*coordRefSys*)

The following code has been taken out from OpenLayers Plugin written by Sourcepole

setReferenceLayer (*layer*)

The following code has been taken out from OpenLayers Plugin written by Sourcepole

set_availability_icon (*tilgjengelighetsvurdering, icons, button*)

Method to set whether object is available or not, not currently in use

showResults (*layer*)

Presenting the result of a search in a table

Parameters **layer** (*qgis._core.QgsVectorLayer*) – search result

show_message (*msg_text, msg_title=None, msg_info=None, msg_details=None, msg_type=None*)

Show the user a message :param msg_text: the text to show the user :type msg_text: str

Parameters

- **msg_title** (*str*) – the title of the message box
- **msg_info** (*str*) – additional info for the user
- **msg_details** (*str*) – details for the user
- **msg_type** (*QMessageBox.Icon*) – the type of message

table_item_clicked ()

Action for item click in table. Selects corresponding object in map, and fills info widget with its data

to_unicode (*in_string*)

Transform string to unicode

Parameters **in_string** – String to transform

Returns unicode version of string

Return type unicode

toggle_enable (*attributes, tr_or_fl*)

Enables or disables gui_attributes

Parameters **attributes** (*list<AttributeForms>*) – list of attributes that are to be enabled or disabled

tr (*message*)

Get the translation for a string using Qt translation API.

We implement this ourselves since we do not inherit QObject.

Parameters **message** (*str, QString*) – String for translation.

Returns Translated version of message.

Return type QString

unload ()

Removes the plugin menu item and icon from QGIS GUI.

updateDataReadProgress (*bytesRead, totalBytes*)

Updates the data progress of downloading data

3.2 AttributForm

```
class AttributeForm.AttributeForm(attribute, comboBox=None, lineEdit=None, comboBox-  
                                   Text=None)  
    Saves attributes and associated gui widgets  
  
    getAttribute ()  
        Returns returns the associated attribute name  
        Return type str  
  
    getComboBox ()  
        Returns returns the associated comboBox  
        Return type QComboBox  
  
    getComboBoxCurrentText ()  
        Returns returns the associated comboBox text, return None if no combobox is available  
        Return type QString, None  
  
    getLineEdit ()  
        Returns returns the associated lineEdit  
        Return type QLineEdit  
  
    getLineEditText ()  
        Returns returns the lineEdit comboBox text, return None if no lineEdit is available  
        Return type QString  
  
    reset ()  
        Resets form to default  
  
    setComboBox (comboBox)  
        Assigning comboBox :param comboBox: :type comboBox: QComboBox  
  
    setLineEdit (lineEdit)  
        Assigning lineEdit :param lineEdit: :type lineEdit: QLineEdit  
  
    setLineEditText (string)  
        Set text in AttributeForm lineEdit :param string: :type str:
```

3.3 SavedSearch

```
class SavedSearch.SavedSearch(search_name, layer, lineEdit_seach, tabIndex_main, tabIn-  
                               dex_friluft, tabIndex_tettsted)
```


INDICES AND TABLES

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- `modindex`
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